



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

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August 14, 2015

Joseph Ludovici
Deputy Assistant Secretary of the Navy
Infrastructure, Strategy and Analysis
201 12th Street South
Suite 701E Room A
Arlington, VA 22202

Joint Guam Program Office Forward
P.O. 153246
Santa Rita, Guam 96915

Subject: EPA comments on the Final Supplemental Environmental Impact Statement (FSEIS) for the Guam and Commonwealth of the Northern Mariana Islands (CNMI) Military Relocation (2012 Roadmap Adjustments), Guam (CEQ #20150192)

Dear Mr. Ludovici:

The U.S. Environmental Protection Agency has reviewed the above-referenced document pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

EPA reviewed the Draft Supplemental Environmental Impact Statement and provided comments to the Department of Defense on July 1, 2014. We rated the DSEIS as *Environmental Concerns - Insufficient Information* (EC-2) due to the projected significant impacts to one aquifer sub-basin and the fact that the proposed project would contribute wastewater flows to Guam Waterworks Authority (GWA) wastewater treatment plants that are currently operating in non-compliance with their existing Clean Water Act discharge permits. We appreciate DoD's collaborative efforts to respond to our concerns. Based on our review of the FSEIS, we have determined that some of them have been resolved. Our remaining concerns and recommendations are discussed below.

Funding for infrastructure improvements

The DSEIS referenced the appropriation of \$106 million from the FY2014 Consolidated Appropriations Act for civilian water and wastewater improvements on Guam. The FSEIS does the same, but provides no update on the status of this funding. EPA is aware that the funding is intended to be used for upgrades to the Northern District Wastewater Treatment Plant (NDWWTP) and the deteriorated interceptor sewer from Anderson Air Force Base to the NDWWTP to mitigate significant impacts to the wastewater system on Guam. We greatly appreciate DoD's efforts to obtain these funds. Since the Economic Adjustment Committee's (EAC) draft report estimates the cost of these and other project-related improvements at close to \$170 million, we encourage DoD to continue its efforts to obtain additional funding for mitigation of project impacts.

Monitoring of Northern Guam Lens Aquifer

Our concerns regarding the impacts to the Northern Guam Lens Aquifer (NGLA) drinking water supply and the future management of the NGLA are partially addressed in the FSEIS. In our comments on the DSEIS, we expressed concerns regarding the lack of clarity with respect to DoD's role in the Guam Water Resource Development Group (GWRDG), as well as the lack of definitive funding sources for the needed improvements to the hydrologic data collection network that were identified in the U.S. Geological Survey (USGS) proposal for its rehabilitation and expansion. The response to comments states that the EAC process would address the requirement for installation of deep monitoring wells and monitoring of the NGLA, and that the Navy endorses these activities as part of an overall strategy within the GWRDG. We are aware that this well installation project is present in the EAC implementation plan and we greatly appreciate DoD's support for this important improvement to the monitoring network. It is not clear, however, whether ongoing monitoring is funded, since it is not budgeted in the EAC implementation plan.

Subsequent to our December 1, 2014 meeting to discuss our comments, we recommended that DoD commit to funding and participatory support for ongoing monitoring through Year 10, as recommended in the USGS proposal to DoD. This would allow short-term and long-term changes in the NGLA to be assessed in response to project changes in land use, stormwater management systems, and withdrawals, and for salinity changes to be evaluated and managed. The FSEIS discloses DoD's participation in the GWRDG, and agrees that an expanded monitoring program, coupled with periodic trend analysis and groundwater modeling, is needed to evaluate salinity changes in the NGLA (p. 4-12). We note, however, that Guam Waterworks Authority currently has no funding for the GWRDG. We continue to recommend that DoD provide financial assistance for both the ongoing monitoring through Year 10, and for logistical and organizational support for the GWRDG, to ensure that effective coordinated aquifer management continues into the future. We recommend that these commitments be included in the Record of Decision.

Potential for groundwater contamination from munitions at Live Fire Training Range

In our comments on the DSEIS, EPA expressed concerns regarding the potential for groundwater contamination from munitions at the proposed Live Fire Training Range (LFTR), since it would be located over the very permeable soils of the NGLA. The response to comments states that the Navy proposes a site-specific implementation of Range Environmental Vulnerability Assessment (REVA) and Operational Range Clearance programs that would be more stringent than required under existing policy, but does not explain how it would be more stringent. We have observed that DoD does not typically verify its REVA model results with actual sampling and monitoring, even when the results of the model exceed the REVA trigger levels, and that DoD considers only limited potential receptors when determining whether further action is needed. We recommend that the Record of Decision specify both the manner in which implementation of the REVA and Operational Range Clearance Programs would be more stringent than existing policy requires, and the receptors that would be considered when evaluating the potential for off-range contamination. Since the FSEIS states that groundwater under the LFTR would not flow towards drinking water production wells (p. 5-333), we also recommend that the Record of Decision clarify whether this means that munitions would be allowed to accumulate in groundwater and discharge to the ocean.

Management of green waste

EPA requested clarification regarding the disposal of large quantities of green waste from the clearing of primary and secondary limestone forest, now estimated at approximately 780 acres under the new Preferred Alternative E. On page 4-117, the FSEIS states that all of the green waste would be diverted

from landfill disposal via composting and mulching on site; yet, on page 4-58, it states that a proposed green waste processing facility at Naval Base Guam landfill may also be used to process green waste generated during construction. Given that DoD requested proposals for burning pallets and green waste in an air curtain burner, it is unclear whether some or all of the green waste that could be processed at the proposed landfill could be burned, instead of composted/mulched. EPA recommends that DoD commit, in the Record of Decision, to divert all green waste through composting/mulching, as stated in the FSEIS and in conformance with DoD's Integrated Solid Waste Management Policy and its support of Guam's Zero Waste Plan. We note that the EIS did not evaluate the impacts of burning green waste.

EPA appreciates the opportunity to review this FSEIS. If you have any questions, please contact me at 415-972-3521, or contact Karen Vitulano, the lead reviewer for this project, at 415-947-4178 or vitulano.karen@epa.gov.

Sincerely,



Kathleen Martyn Goforth, Manager
Environmental Review Section

cc: J. Dan Cecchini, Office of the Assistant Secretary of the Navy
Mark Calvo, Office of the Governor of Guam
Eric Palacios, Guam Environmental Protection Agency
Mark Miller, Guam Waterworks Authority